

Title (en)
SEPARATOR-LESS CONDUCTIVE POLYMER SOLID ELECTROLYTE SECONDARY BATTERY

Title (de)
SEPARATORLOSE LEITFÄHIGE POLYMER-FESTELEKTROLYT-SEKUNDÄRBATTERIE

Title (fr)
BATTERIE SECONDAIRE À ÉLECTROLYTE POLYMÈRE SOLIDE CONDUCTEUR SANS SÉPARATEUR

Publication
EP 3745517 A1 20201202 (EN)

Application
EP 18902575 A 20180427

Priority
• JP 2018022496 A 20180124
• JP 2018018439 W 20180427

Abstract (en)
Solid state solid electrolyte rechargeable battery in no use of separator comprising a positive electrode / a conductive polymer solid state electrolyte layer / a negative electrode in which the solid state electrolyte layer is a composition comprising an inorganic solid electrolyte and a polymer electrolyte composition wherein the polymer electrolyte composition is selected from the group consisting of a polymer electrolyte composition (X¹) obtained by graft polymerizing or living radical polymerization of a molten salt monomer having a polymerizable functional group and having an onium cation and an anion containing a halogen with a fluoro polymer, and a polymer electrolyte composition comprising (X¹) and at least one kind selected from the following (X²) and (X³), X² : a molten salt having an onium cation and an anion containing a halogen, or a molten salt monomer having a polymerizable functional group and having an onium cation, X³ : a polymer or copolymer of a molten salt monomer having a polymerizable functional group and having an onium cation. Ph-75. By providing this rechargeable battery, the solid electrolyte rechargeable battery without separator which has a descending effect of particle interface resistance between a positive and negative active materials in case of using conductive polymer solid electrolyte, a thin film cell, a less dependence on the temperature and excellent safety in case of happening short circuit can be obtained.

IPC 8 full level
H01M 10/056 (2010.01); **C08F 259/08** (2006.01); **C08L 51/06** (2006.01); **H01M 10/0525** (2010.01)

CPC (source: EP KR US)
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C-Set (source: EP)
C08F 259/08 + C08F 220/34

Designated contracting state (EPC)
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